

Communication Through Face

How Buildings Speak



Eckman

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Undergraduate Architecture Thesis
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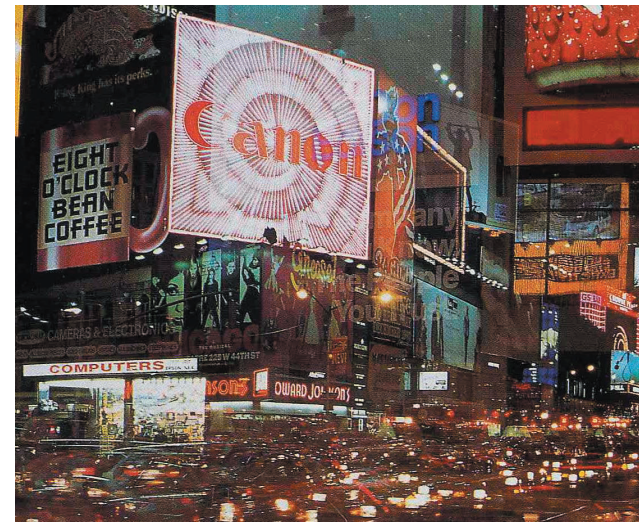
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Contents

Introduction	3
Communication	5
The Evolving Face of Architecture	7
The Communication Potential of Facade	9
Design Exploration One	11
Design Exploration Two	13
Establishing a Language for Communicating	17
Process	23
Analysis and Reflection	36
Bibliography	38

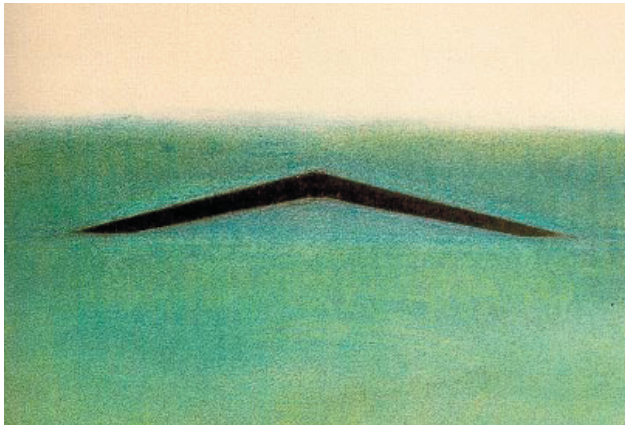


Introduction

The face is the primary mode of expression and communication. Notions of beauty, status, and culture can all be expressed through how the surface of an object communicates. Buildings communicate through their facades, or faces, as well. The building “speaks” through expressions of function, through symbols, or through contextual relationships.

Society today has become more fast-paced due to the advancements in technology. This change has sparked a reliance on ‘billboard’ architecture for buildings to communicate to the general public. How can a more functionally and contextually expressive language be defined and applied to a building?

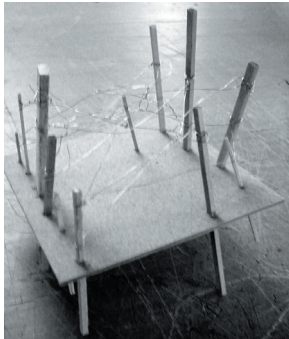
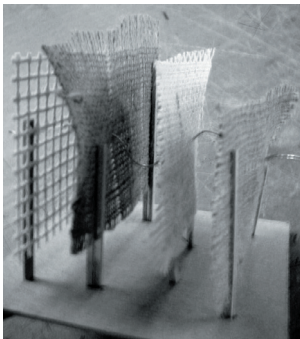
Through the exploration of a library, whose function and meaning are rooted in tradition but are also on the forefront of change, can the architectural expression through face comment on the function of a library as a civic institution as well as the place of the library in the context of an evolving and diverse neighborhood? By defining the language of the place, the function, and the cultural context, a story can be told about how the design communicates.



Memorial architecture fundamentally reveals how a language could be established between the user and the architecture. Maya Lin enriches her memorial designs to convey meaning through a physical and an experiential language. In the Vietnam Veterans' Memorial, she presents this language through procession, scale, materiality, and text to imply meaning in the object. Analyzing her work was essential in how I began to understand how an architectural artifact could create a dialogue with the person interacting with it.



vietnam veterans memorial, maya lin



By studying how different buildings communicate messages through symbolism, function, and persuasion, physical models explored how to express the way in which the receiver interacted with and responded to the messages.

Communication

Communication is defined as the system for sending (and receiving) ideas. All buildings convey messages, whether functional, symbolic, or persuasive, through different methods of communication. Buildings communicate their identity through their facades, or faces. A facade is an external wall which serves as the primary source of communication in a building. It is a surface that “looks onto” its surroundings, or is perceived from its surroundings as the prime message.

Facades are composed of a series of edges and planes. When the properties of these edges and surfaces change, it is evident that there is change in the function. The boundary that is created by the facade is carried from outside to inside, creating public and private zones. Transition between these zones is by way of the facade. Therefore, the facade is essential in making the viewer aware of this passage, marking a new identity related to the function, the site, and the cultural context.

Communication takes place between two sources, the user and the architecture. A “point of view” describes an opinion in the conversation. How can the “opinion” of a particular building face be affectively communicated to the user? The zone of the facade is essential in creating this dialogue between the user and the architecture.

The façade is not only the exterior shell, but also the interior walls and structure that define a space. Facades connect spaces, both interior and exterior, with different user groups. How do the horizontal and vertical surfaces relate so that people can interpret the spatial and experiential differences between the two sides? What is the potential of their communication being facilitated by considerations of these transition zones or ‘facades’?

The Evolving Face of Architecture

Today, many buildings are attention-seeking objects, providing visual flash without meaning behind them. The facades have often become separate entities unrelated to the function of the building. Traditional notions of the facade suggest that they are an expression of the values of society, such as wealth, power, and cultural norms. Facades were designed to be representative of these values through their language, deriving methods and elements from classical architecture.

Classical

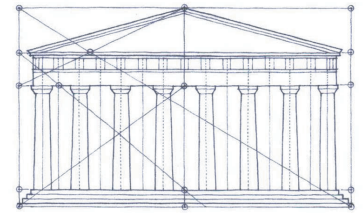
Classical architecture is based on a tripartite system of order, separating the facade into the base, middle, and top. The classical order is one of the most ancient building styles, distinguished by elements such as the columns, capitals, pilasters, plinths, bases, mouldings, and entablature (architrave, frieze, and cornice). These elements form the language of the facade, speaking symbolically through the way that they express the structure and incorporate meaning by sculpture and text. These elements have been transferred to many architectural styles.

Early Modernism

Louis Sullivan claimed that the form was directly related to the function expressed through the facade. His expression “form ever follows function” relates to the idea that “form” is the natural consequence of meeting the functional requirements of the building. These ideas, which are part of a modern view of architecture are characterized by:

- A rejection of historical styles as a source of architectural form (historicism)
- Simplification of form and elimination of “unnecessary detail”
- Expressed structure

Sullivan’s Wainwright Building in St. Louis, Missouri is an example of the modernist ideas concerning the relationship between the form and the function through the articulation of the facade. Sullivan used a modern style to give unity to the tall building. Ornamentation was integral rather than applied, making the exterior transparent to the interior functions. The clues that Sullivan borrowed from classical building design were breaking the facade into the tripartite composition. The first floor was dedicated to commercial functions, clearly identifying the public nature of the space by the wide doors and relationship to the street. A two story base on the exterior identified that the semi-public second floor offices were directly in relation to the first floor. The middle section contained offices identified by a series of identical windows. Sullivan was reacting to his belief that an office is “a cell in a honeycomb...nothing more.” The top floor was closed to screen the machinery and mechanical functions. The deep overhead cornice is covered with ornamented skin to match the decorative spandrels. The ornamentation emphasizes the structural elements that form the building, reinforcing the building’s verticality.



the parthenon, athens



wainwright building, sullivan



wainwright detail, sullivan

Postmodernism

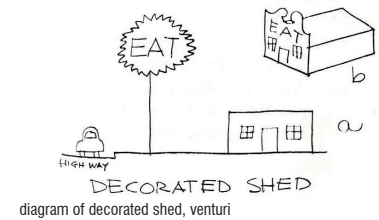
Often applied to the public side of architecture, classical elements in architecture gave rise to the discourse of buildings as “decorated shed.” This describes facades conveying an identity that is typically not effective in creating a meaningful dialogue about the architecture’s identity, including expression of its function or the conversational impact of the context. Venturi defines the ‘decorated shed’ as “systems of space and structure that are directly at the service of program (shed), and ornament is applied independently of them (facade).” (Brown, Izenour, Venturi, p.87) By this, the elevation is superimposed onto the plan diagram without any connection to the inherent qualities of the building. Essentially, they are billboard buildings, broadcasting their values without a true dialogue established in relation to the meaning of the function.

These ideas are visible in Venturi’s Vanna Venturi House. Through signs and symbols of various architectural styles, the facade is displayed as a mask, relating to the context, but not directly relating the interior spaces. These styles are applied to the facade to express the traditional notion of the function. The gable, door, window, and chimney are the architectural elements that imply “home,” but aren’t transparent to the interior spaces of the building.

Contemporary Styles

With the evolution of technology in today’s society, contemporary architecture, such as the work of Herzog and De Meuron, has relied on a new type of symbolism to express meaning on the facade. By the study of Eberswalde Technical School Library, an open-stack library for forestry and applied sciences, Herzog and de Meuron wrapped a simple rectangular volume with bands of concrete that corresponded to bands of glazing. This glazing had rows of silk-screened images also wrapping the building. The images of old newspaper and magazine articles, had political and symbolic messages embedded in them. While this pictorial façade is overt in its imagery, there are implicit messages in the images that relate it to the function of the library of conveying information to the masses. Is this implicit meaning artificially connected to the tactile experience of the space or is it referencing a current movement that is bound to change? Images evokes thought and can manipulate some experiential qualities of the building, but they do not provide a meaningful language relating the interior spaces to the exterior surface.

These identities were important in the design process to define the message being communicated, whether symbolic or functional. Should architects enrich an experience rather than affix an image to the façade? The image can be effective in creating an identity of the building, but how does the essence of the function inform the façade and, furthermore, communicate to the user? How can architecture step beyond this convention and explore more subtle ways that buildings communicate through their faces? Or is it convention from which facades derive a greater sense of meaning through an already established language?



vanna venturi house facade, venturi



eberswalde exterior, herzog and de meuron



eberswalde facade image, herzog and de meuron

The Communication Potential of Facade

Developing an Architectural Language

Every face of the building expresses a message, whether symbolic or functional, about its identity in relation to the site, function, and cultural context of the building. The façade expresses something about what its role is in the building. By determining the language in relation to each surface, communication can be established that conveys a message about the identity of that façade. Each surface is a response to its relationship to the surrounding context and the function of its interior spaces. By understanding what the boundary is defining (site and function), the language is further enhanced by defining who the communication is between, the message and identity being communicated, and the methods of defining the language of the surface.

‘The way people perceive depends on the context in which they are in.’

Process:

1. Developing an Initial Understanding the Architectural Context (site)

By understanding the site, the process of defining who the communication is between can begin to influence the building form. The form is defined by the mass and the shape of the building. Mass is the volume defined by its relationship to the size, proportion, and hierarchy of the surrounding buildings and the needs of the function. After the initial form of the building is set, further definition of each facade can be analyzed in relation to its function and cultural context.

2. Defining who the Communication is Between

Communication is intended to occur between different user groups and the architecture. Different facades of the architecture can communicate to different user groups. Only when the user and architectural context are defined and analyzed can the nature of the communication be defined.

3. Defining the Message Being Communicated

The symbolic and functional messages are communicated as the “point of view” through the facade to create an identity. The identity is defined in response to the function and the cultural context. A face is the primary front that expresses a person’s identity, which is expressed through a façade in relation to a building. By recognizing the architectural identity (function, cultural context) that each façade is communicating, the language can be defined.

4. Defining the Architectural Language

Language is a set of rules and methods that establish communication. The language is defined through using classical ideas(geometry, layering, access, procession) of design and further analyzing typical facades and spaces related to the function, the site, and the cultural context. By understanding the site characteristics and culture and analyzing the traditional notions of facade related to each function in the building, a language can be established through the physical and experiential qualities of space. These physical and experiential methods of defining language are explained in greater detail on the following page.

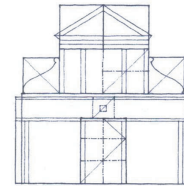
Physical and Experiential Methods of Language

These are methods that relate to classical architectural design. By using these traditional methods, different symbolic and functional messages can be communicated. These terms emerged from the design explorations on the following pages, which attempted to further establish these methods to test in the final thesis project.

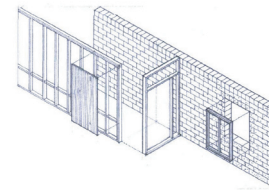
Physical:

Geometry

A building façade reacts to the geometry from the existing language of the surrounding context as well as the functional requirements of the interior space. The geometry of the mass and form, the spatial layout, and the breakdown of elements on the facade all speak to how they are communicating.

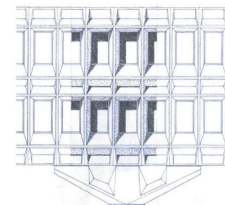


santa maria novella, florence



Layering

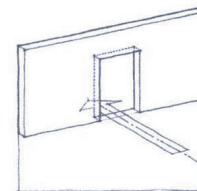
A building façade has the potential to engage the depth beyond the surface plane; the formal and spatial qualities of these 'facade zones' are an opportunity. The manner in which spaces are layered can give clues to how the function inside is displayed on the exterior facade.



ibm research center, marcel breuer

Access

In addition to functional expression, facades set the stage for communication to occur at different levels. Access, through physical and visual means, is essential in allowing people to react to what is going on inside the building. Creating a play between solid and transparent materials creates a dialogue with the users on the interior and exterior spaces of the façade.



Experiential:

Procession

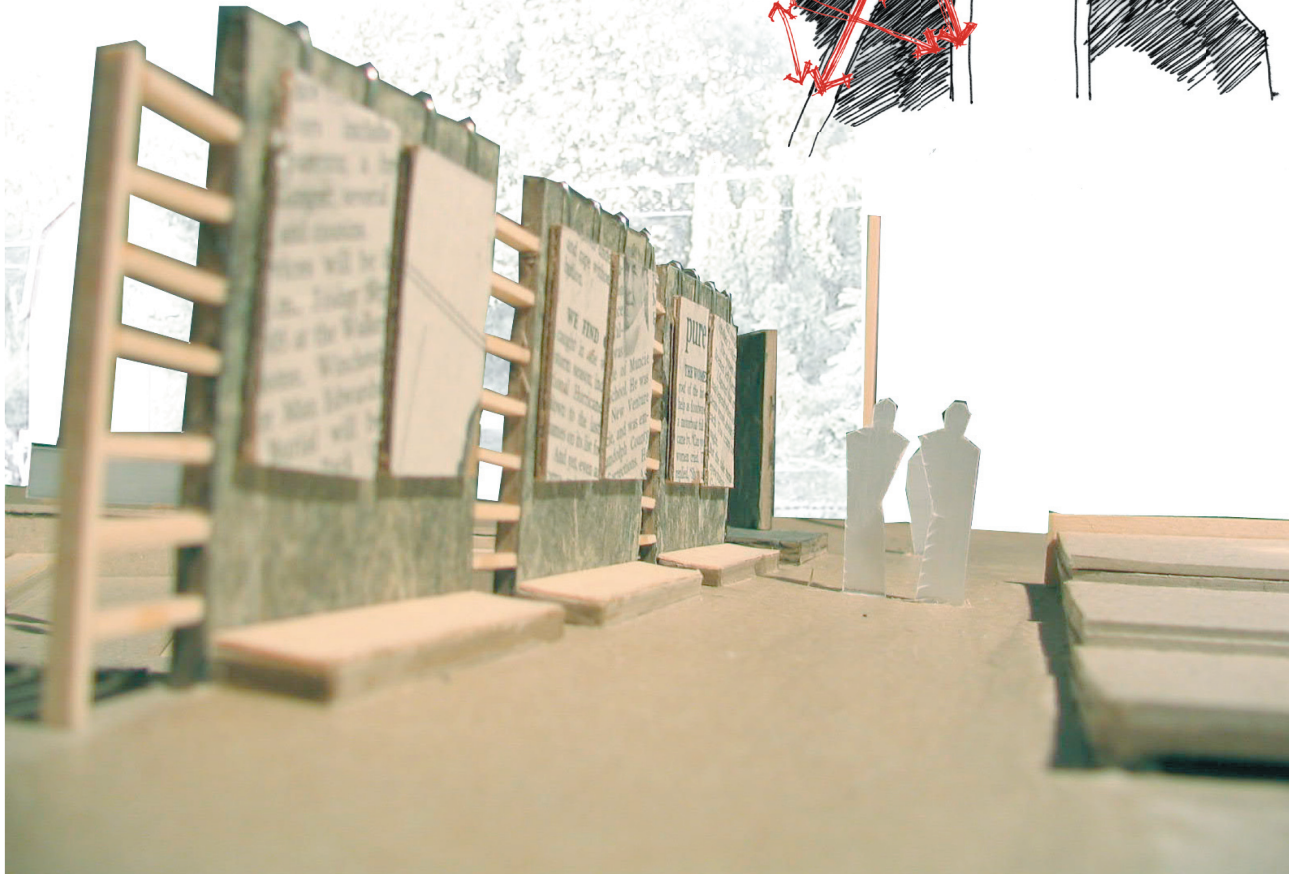
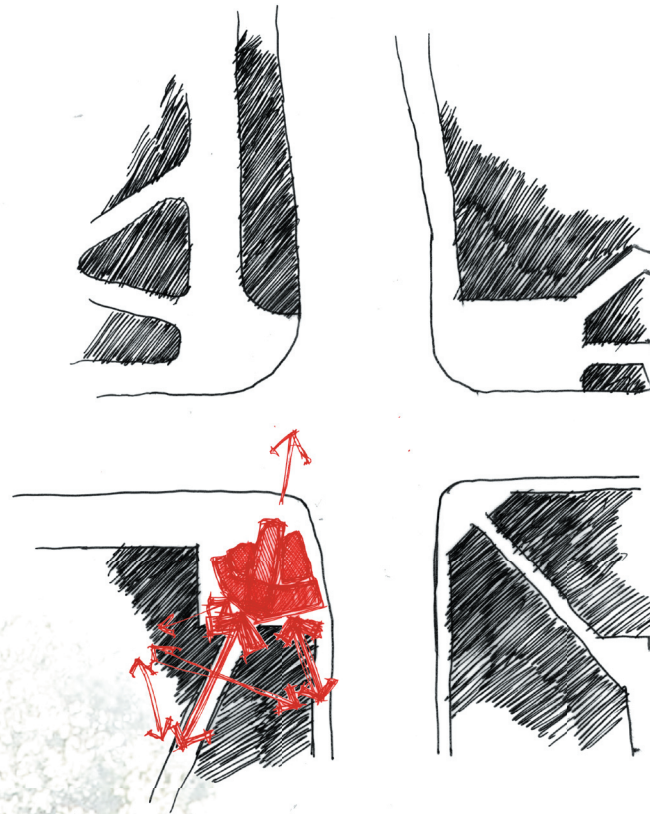
The physical aspects of spatial design determine the procession through the space. Circulation is the means to which people transition from one public or private realm to another. The edges formed by the pathways and the spatial layout can be articulated to enhance the spatial experience and communication between the users. Dimension is created through the movement systems in a building, thus defining different experiences for the user as they encounter each zone in the building.

Design Exploration One: A Dialogue Space

1. An Initial Understanding the Architectural Context

Site: Ball State University Campus 'Scramble Light'

The site is characterized by a pathway that cuts through the middle. It is the main thoroughfare for many students accessing the different quad spaces. This breaks down the space into a public and a private edge. Therefore, the wall was placed to further define this demarcation. The wall acts as the main facade.



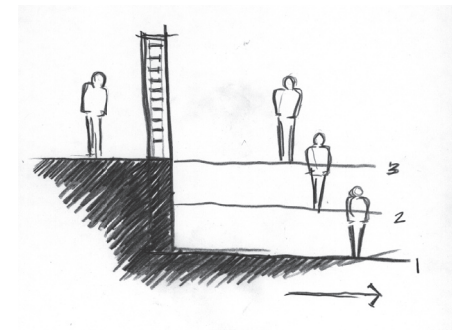
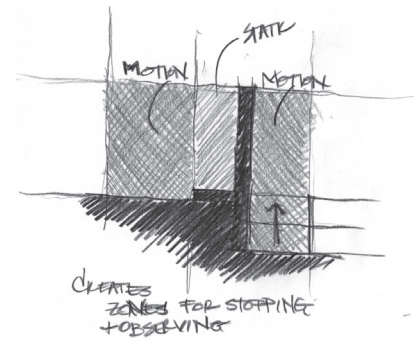
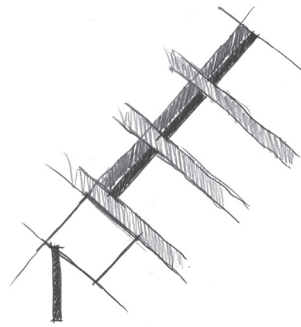
2. Who the Communication is Between

Speaker and Audience:

The wall folds down to create a platform for the speaker to communicate to the audience in the amphitheater.

User and Architecture:

Communicating to the people sitting in the amphitheater is different from communicating to the fast-paced audience walking by. Therefore, the image of the speaker is projected onto the large wall surface facing the street. At a more private level, the surfaces lining the pathway display information that is easily accessible to the pedestrians.



3. The Message Being Communicated

The surfaces lining the pathway act as billboards. They are displaying messages through the use of imagery and text.

4. The Architectural Language

Geometry

The articulation of the facade created zones to allow for the person to interact with the surface and user group differently. The scale of the surfaces relates to their function as billboards, with hierarchy given to the surface that communicates to the street. The wall was broken to create separate zones of space for the user to stop and interact directly with the surface.

Layering

The wall is layered in response to the different functions of displaying information.

Access

The facade was broken apart, allowing views from the pathway into the amphitheater. This allowed for visual communication to take place between the two user groups.

Procession

The surface created facilitates the procession that was already in place on the site.



Design Exploration Two: A Film Studio and Exhibition Space

1. An Initial Understanding the Architectural Context

Site: Muncie, Indiana Theater and Arts District

The site is located on the block of Main Street and Jefferson Street in downtown Muncie, IN. The intervention takes place on a small lot directly adjacent to a series of narrow, urban buildings containing theater and art spaces. The function of the building was determined by the location of the site in the main art district in downtown Muncie.

The analysis of existing facades in the initial design process resulted in the overall massing of the building, creating a shell that was manipulated after the configuration of the interior spaces. The characteristics of the two facades allowed for the exploration to focus on how the interior spaces filtered through to communicate the experience of interacting with the building.

2. Who the Communication is Between

User and Architecture:

The front facade communicates with the pedestrians. This creates more articulated facade conditions because the pedestrian will have more direct interaction with the facade. The side facade acts as a billboard to the cars traveling on the one-way street. The people circulating through the building become the facade. This allows that facade to communicate at a larger scale.

Visitor to Worker:

On the interior, communication is between the filmmaker and the viewer through the separation of static and movement spaces. This also occurs in the 'alley', which is a circulation zone primarily for the filmmakers and workers to access the work space.

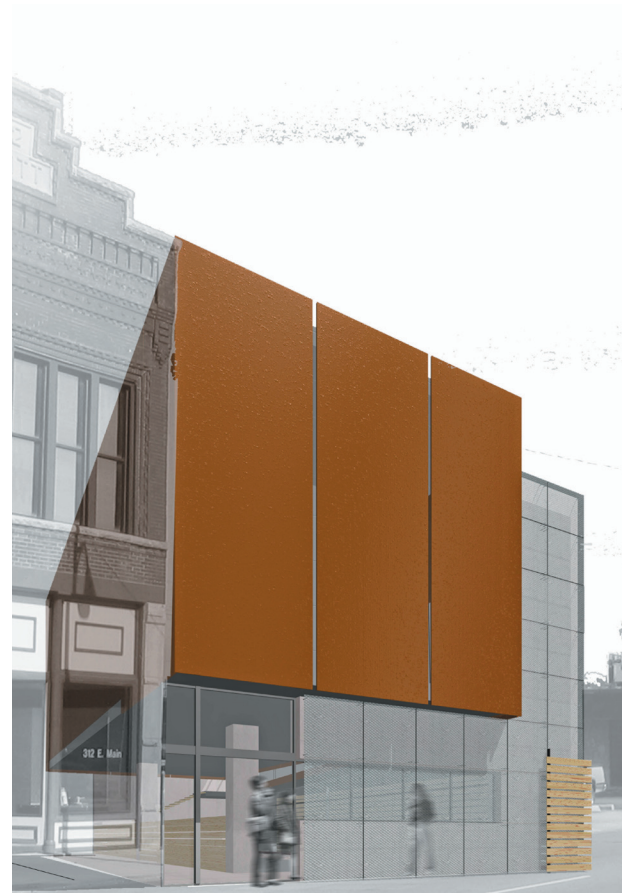
Adjacent Facade Analysis

Front Facade

Function: Commercial and Office Space

Characteristics:

The geometry of the facade provides clues to the order of the spaces inside. Prominence is given to the front facade by materials, form, and openings. Second level windows signify private functions with ability to control views to the public realm of the boulevard. First level is open and vacant for users to change functions easily. Private functions are concealed to the back by a secondary interior facade. Entry is easily identifiable.



Side Facade

Characteristics:

Materials are rough, displaying a more utilitarian billboard surface. The hierarchy of the building facade is evident through the scale of the front and back facades. Levels and functions of the interior spaces are not displayed on the exterior surface.



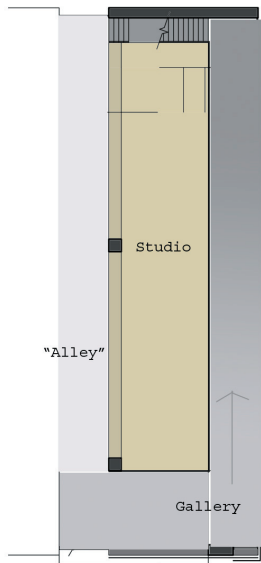
3. The Message Being Communicated

Understanding the Function

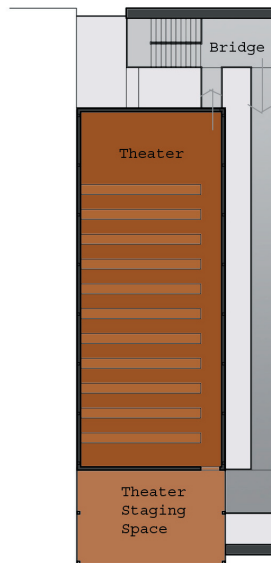
With the technological advances of our society, film has become a more advanced art form. There are opportunities for an interesting dialect between raw production and the finished product of a movie. Spaces of a theater traditionally need darkness. Contrary, the work spaces need flexibility and durability. Therefore, the materials and spaces create a different language through materials and geometry.

Understanding the Cultural Context

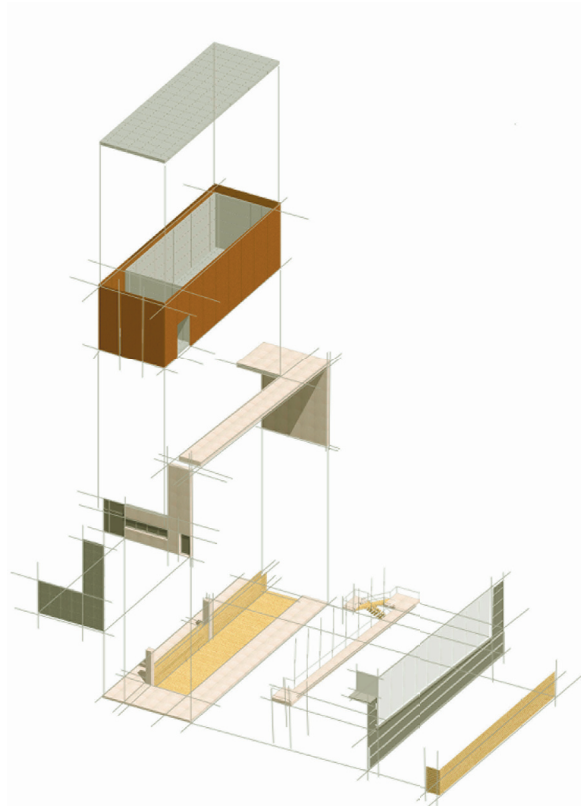
Procession through the space is important in understanding its function as a film studio and exhibition space. Film is an important cultural activity of our time. The experience of viewing a film is expressed in the building through the procession through the space. By communicating the importance of theater in the community, the process of entering and walking down a long corridor to the movie theater is enhanced.



First Level



Second Level



4. The Architectural Language

Geometry

The overall geometry of the building, as well as the geometry of each face, is in relation to the adjacent buildings. This allowed for the two facades to create different dialogues with the users. The long shape of the spaces creates a hierarchy of public and private zones. The private zones are located on the upper level in relation to the context. The geometry creates two main zones, the static and the movement spaces. The circulation becomes the buffer zone from the static functional spaces to the exterior.

Layering

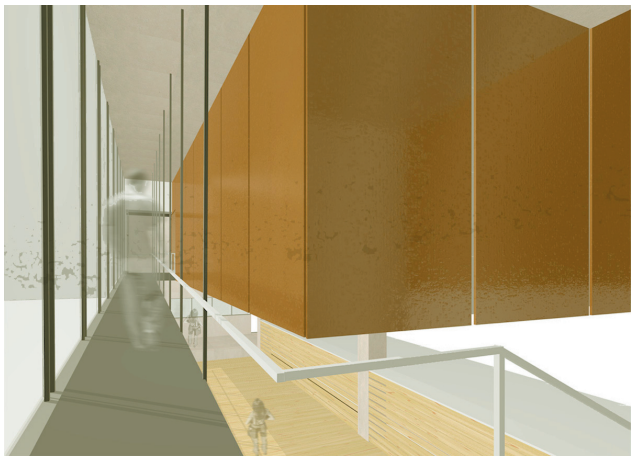
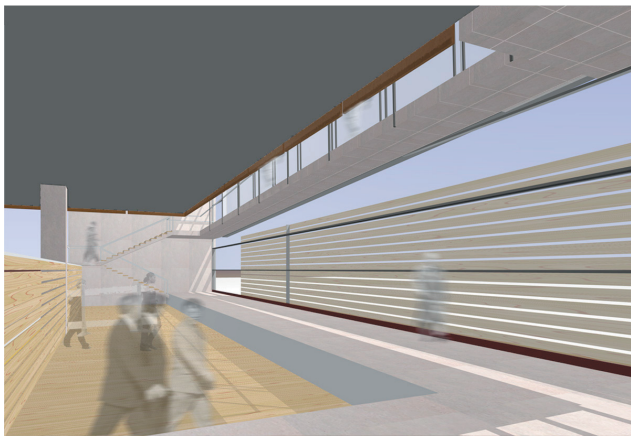
The layering of a metal screen on the front facade allows it to be expressed as a mask, shielding the vacant interior spaces. The layering on the side facade relates to the procession of the person through the hierarchy of spaces.

Access

The shell of the building wraps the front, top, and back of the building, creating opportunity for the interior of the spaces to be completely transparent on the exterior. This allowed for the solid material of the front facade to be manipulated to create a dialogue with the pedestrian. The doorway lines up with the 'alley', allowing for the front facade to be expressed as a mask.

Procession

The procession relates to the process of making a film and exhibiting it for the public to view. The user interacts with the building in a linear motion, walking through the process of making the film. As they ascend upward toward the theater, the long narrow pathway changes as the function changes. The action of walking down the catwalk to the dark theater evokes traditional notions of entering a movie theater. As the person enters the dark space, the process is interrupted by a staging area. They enter the theater, marking the final point in the production of a movie.



Mask Front Elevation



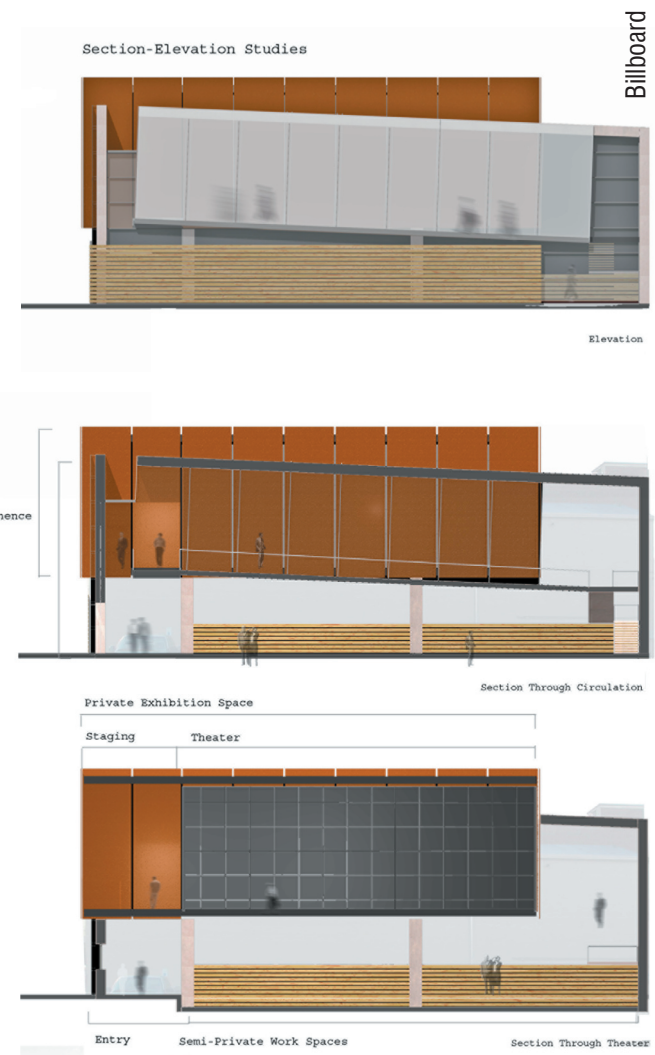
Section Throuth Theater/Alley/Studio

The function of the theater is evident from the face by its materials, scale, and proportion in relation to the other elements on the facade. The hovering box marks that it is a private space, which relates to the second level of the adjacent facade.

Communicating a Story Through Experience

Experience is through movement through facades and formalistic moves of the building:

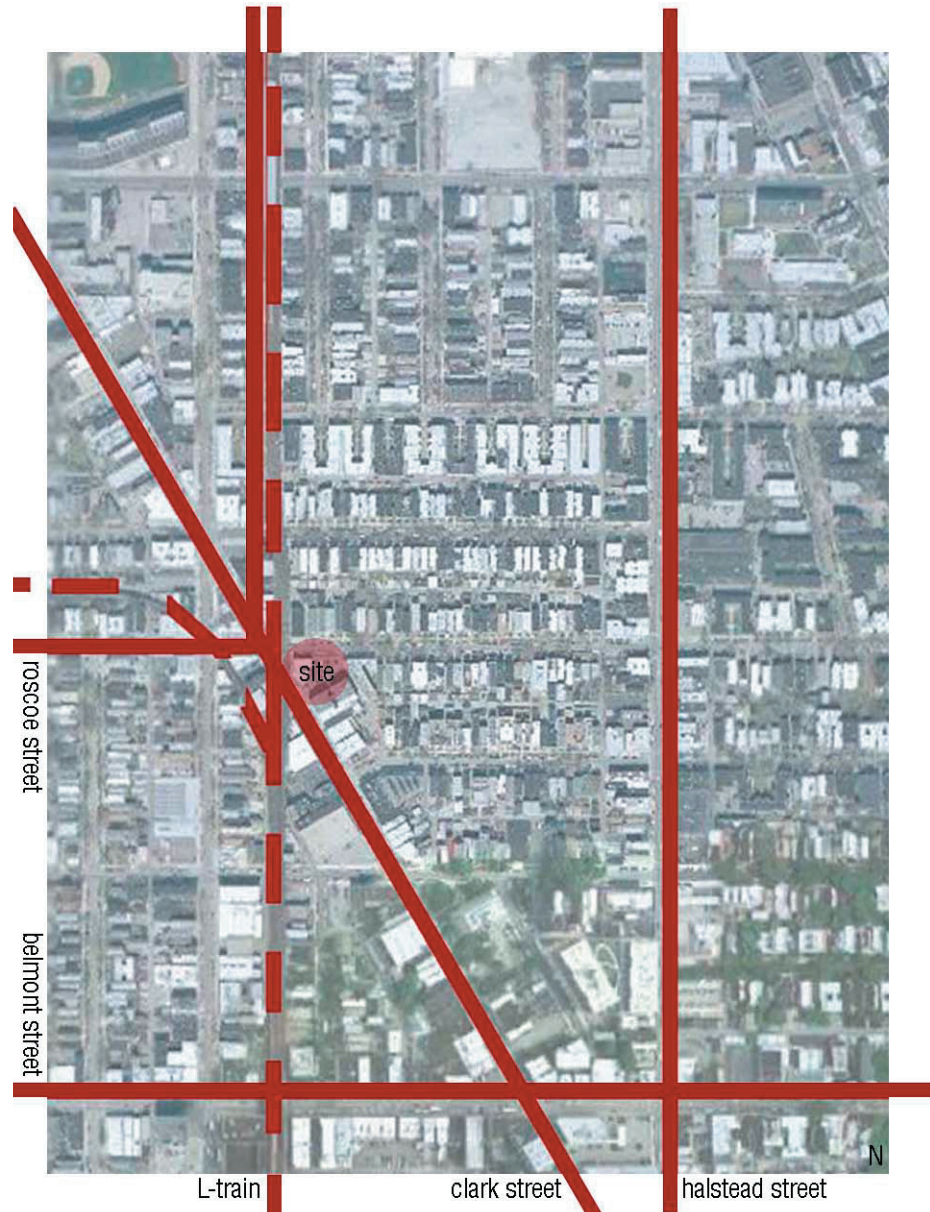
- Entry
- Gallery
- Studio Space
- Circulation
- Theater Staging Space
- Theater
- Alley



Establishing a Language for Communicating

Designing a Contemporary Library in an Evolving Neighborhood

The methods of establishing language were fully developed in the final design process, which established a language by creating the shell, developing the overall building language, and then developing further each facade in relation to the interior spaces.





Site: Chicago, Illinois

The site is located in the Lakeview district of Chicago, Illinois. With such an evolving and diverse neighborhood and a rich contextual language already set in place, the issues of communication could be challenged. The district of Lakeview is located on the north side of downtown Chicago.

The character reflects a diverse mixture of cultures and building typologies. The semi-open site exposes three sides of the building, all reacting to different conditions of communication. It is characterized by the L-train that cuts across the north edge of the site, allowing for three distinct faces to be formed on the building to the street. The site is also a convergence of renovated residential to the east and a highly commercialized strip to the south.

How can there be established a relationship between the traditional notions of a library in this neighborhood, while simultaneously expressing the diversity and vibrancy of its people? What the permanence of a library in such an evolving neighborhood? How do I convey the sense of neighborhood and civic library to an evolving neighborhood with an already established urban language?



The rules of the contextual façades are already established on all sides of the site. There are common characteristics to the neighborhood that suggest that this design should follow the established rules. Certain characteristics, such as the geometry, adjacencies, urban wall conditions, scale, and proportion all suggest and respond to certain functions in the surrounding buildings on the site. Geometry is one of the most important characteristics of the existing façades. The scale, breakdown of materials, and proportions are unique to each street. Each streetscape has a different character which was analyzed and applied to the massing and functional response of the building.



Clark Street

Function: The majority of the buildings house residential and office on the upper levels and restaurants and commercial functions on the lower level.

Characteristics: The façades are temporary shells for the commercial and residential uses to change over time. The hierarchy of public and private spaces is clearly demarcated through the geometry and breakdown of the facade.



Roscoe Street

Function: Residences with a variety of users line the north edge of the site on Roscoe Street.

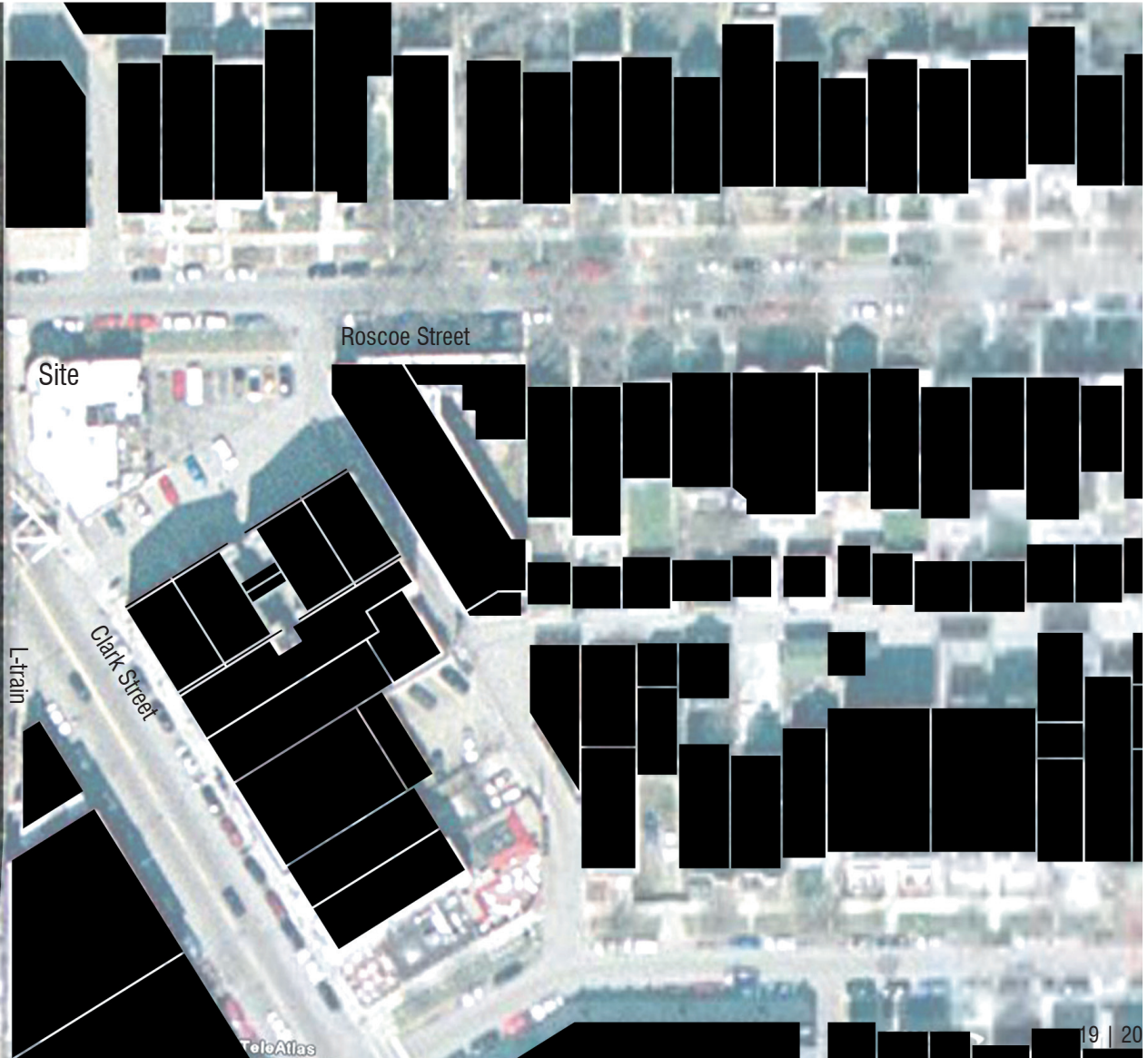
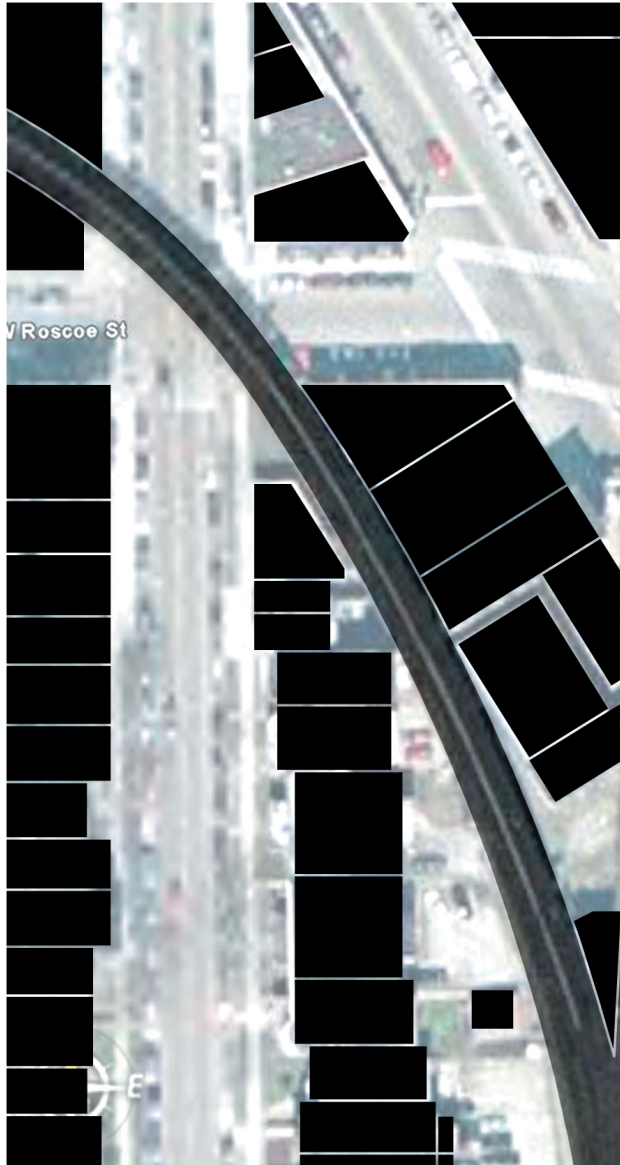
Characteristics: The typical facade is set back from the street with a sidewalk and small yard in front. Typically, a stairway leading up to the facade entrance and, in some cases, a porch defines the approach. The levels are similar to the commercial in the layout of public and private zones, with the exception of a ground level sinking into the ground, creating a private space underneath the main public space.

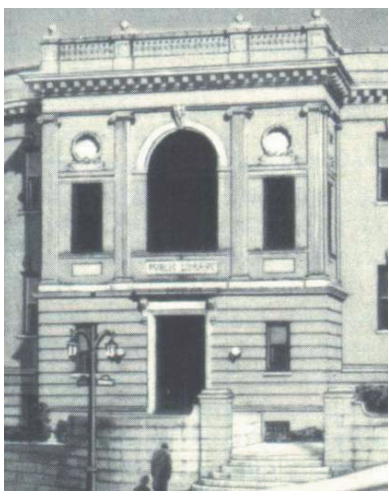


L-Train

Function: The L-train is the edge of the west side of the site. The users of the L-train will interact with the building in a completely different way than the pedestrians. The building will act as a billboard for the passengers.

Characteristics: Although buildings on the opposite side of the street are visible underneath for the pedestrian, the L-train creates a zone that is sometimes occupied by cars, mechanical space, and utility spaces. The L-train is characterized by rough metal beams and columns.

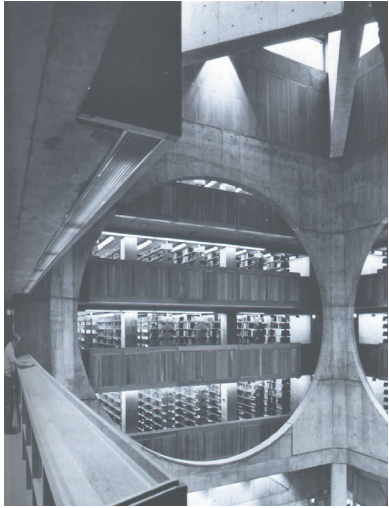




carnegie library in yonkers



traditional library reading room



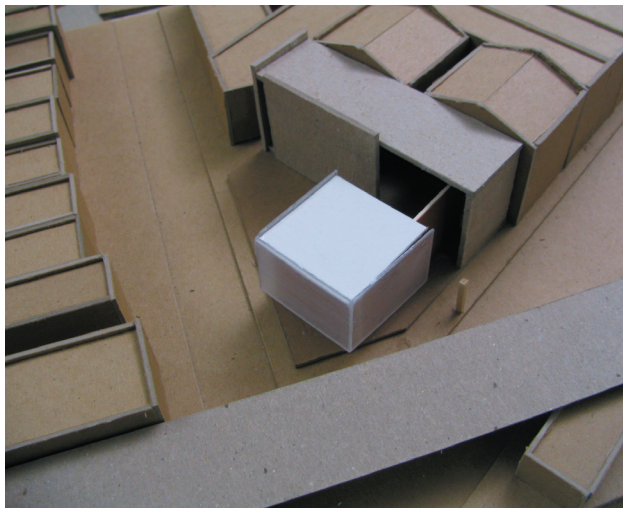
philip exeter academy library, louis kahn

The Language of the Library

All libraries give insight into the culture that they are of. Contrary to European libraries designed solely for the elite in society, the modern public library is derived from the idea that a library is a civic institution, providing spaces for conveying information to the masses. The most common form of library in the early 20th century in America is the Carnegie Library. Sponsored by Andrew Carnegie in response to the need for public, civic structures for all people to access information, the libraries were built in numerous small communities around the world. Many of the library buildings displayed classically-derived facades, such as the Beaux-Arts and Baroque facades. Each style was chosen by the community and was simple and formal. The facade served to welcome the patrons through a prominent, centralized doorway. A stairway almost always was part of the entering experience. The culture of the library was evolving at the time. The nature of the Carnegie Library was the public was free to choose and access information.

Since the late 1970s, libraries have changed due to the advancing technologies of our time. Although the library is still a civic structure built for the community to access information at large, the addition of computer and internet technology has allowed people to access information in a more universal way. This change has resulted in a new way that people communicate and learn. The way a library serves the general public has changed. Does the ever-changing service of the library change the argument that facades should have a more tectonic sense instead of being a digital facade? Does the library have a new identity that relates to today's vibrant and fast-paced world? Is this an essential characterization of its identity that must be communicated?

There is already a preconceived notion of what a library should be and should look like. I intended to challenge these issues through exploration of how the function is expressed on the building facade. With further investigation, the program and overall design scheme were classified into three critical identities: civic/traditional, community, and technological. The dialogue established between the spaces that carry books and the spaces that provide internet access have been challenged and addressed by change in materials, forms, circulation, use, and access. Each identity is broken down into what its language is. The assemblage of parts relates to the nature of a Chicago streetscape.



Process:

The final design process strives to examine further the relationship of the entire building language with the language of each facade. The building, as a whole, is therefore analyzed and then broken down into an analysis of each facade.

1. Initial Understanding of the Architectural Context

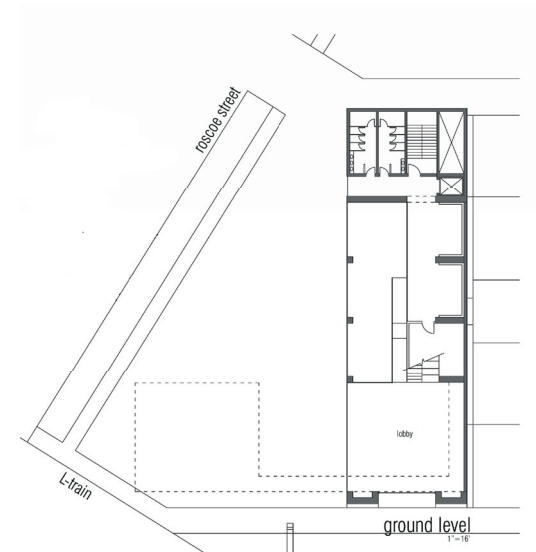
The initial site analysis revealed a disjunction between the surrounding character of the facades. The massing formed a simple solution that responded to unique geometry of the site.

The rectangular library mass takes clues from the buildings directly adjacent to the it lining Clark Street. This allows two facades to be further broken down, the front mask responding to Clark Street and the side facade reacting to the residential street. The square mass holds the computer and mechanical spaces. This is in response to its location bordering the L-train. This mass acts as a billboard, expressing its role as the contemporary and technological piece in the building. The overall form of the building creates a courtyard which allows the community facade to be reinforced by this urban edge condition.

Programmatic Needs

Civic/Tradition
Circulation Desk
Book Stacks
Main Reading Room
Archives
Study Rooms
Community Rooms
Office and Staff Space

Computer/Technology
Computer Space
Mechanical/Technology



2. Who the Communication is Between

User and Architecture:

The design resolution focused on three critical facade identities. They all communicate to different user groups in relation to their position on the site. The front facade communicates to the pedestrians on Clark Street. The facade bordering the courtyard communicates to the community, the people using the courtyard, and the residents on the north edge of the site. The technology facade communicates primarily to the passengers on the L-train.

Reader and Computer User:

The interior spaces allow for opportunities for different user groups to communicate to each other through the interior facades. The wall of books was an important interior facade which allowed the two functions to interact.

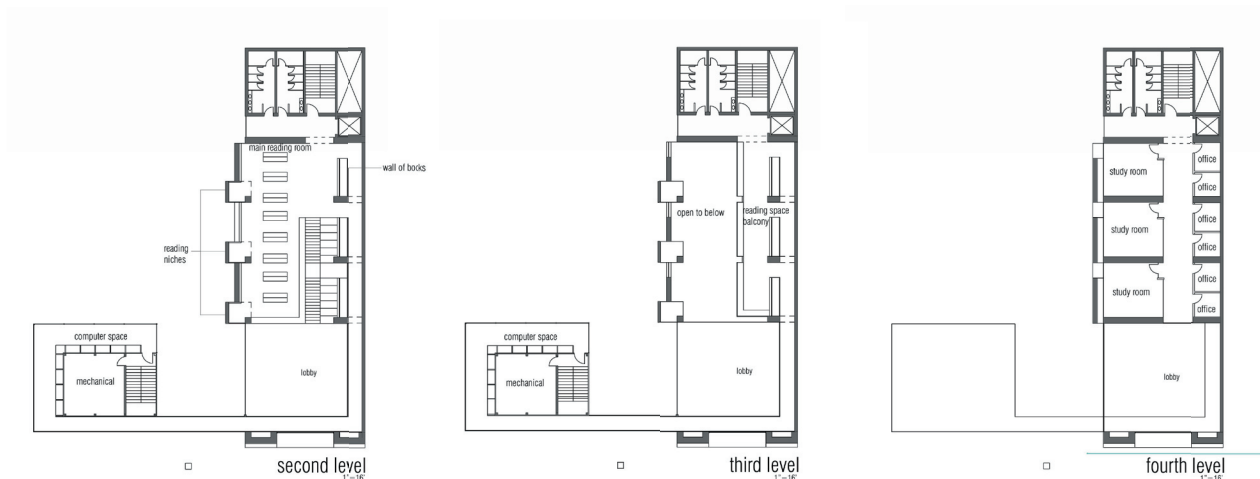
3. The Message Being Communicated

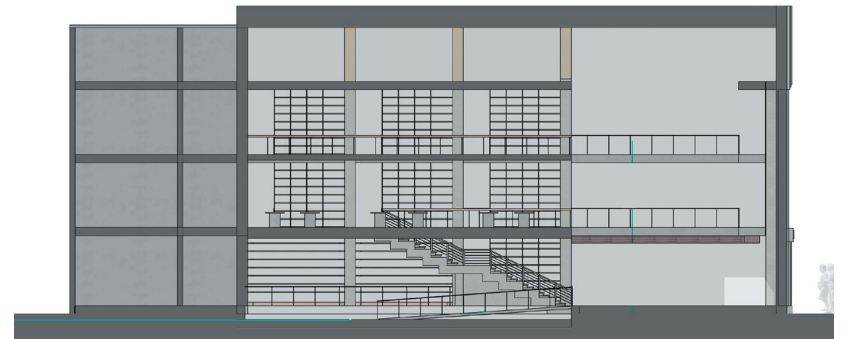
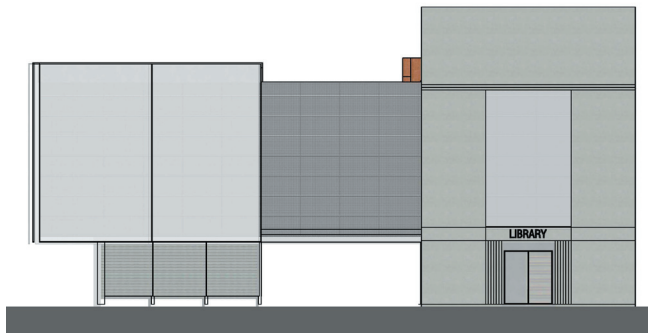
Understanding the Function

The rules of the library as a civic building are challenged in the design. Typically, library reading, book, and community spaces are housed on one level to provide unity between the user groups. Due to the site and the changing notion of a library, the spaces were broken up, creating a different dialogue relating to the library's identity, expressed through the facades.

Understanding the Cultural Context

The cultural context is defined by the evolving needs of the user groups on the site. The neighborhood is energetic and pulsing at all times of the day. The function of the library on the site creates tension between the typical quiet space associated with a library and the fast-paced nature of its users and society today. These were challenges that were addressed by the identity of each facade.





4. The Architectural Language of the Spatial Layout

Geometry

The geometry of the library space is in relation to an interior wall of books. The bookshelves, which traditionally attach to the heaviest wall, break away and create an interior facade. The heavy masonry piers support the wall and create a zone of circulation for access to the computer space. Geometry of the spaces vertically relates to the tripartite classical system. The bottom, middle, and top spaces all relate to the hierarchy of public and private functional needs. The geometry of the computer space relates to the functional layout, which reflects the process of accessing a network through the computer. While this process seems to be a private function, similar to reading a book, the person is accessing an entire other world. Therefore, the orientation of the computer desks is inward, allowing the computer screens to become another facade.

Layering

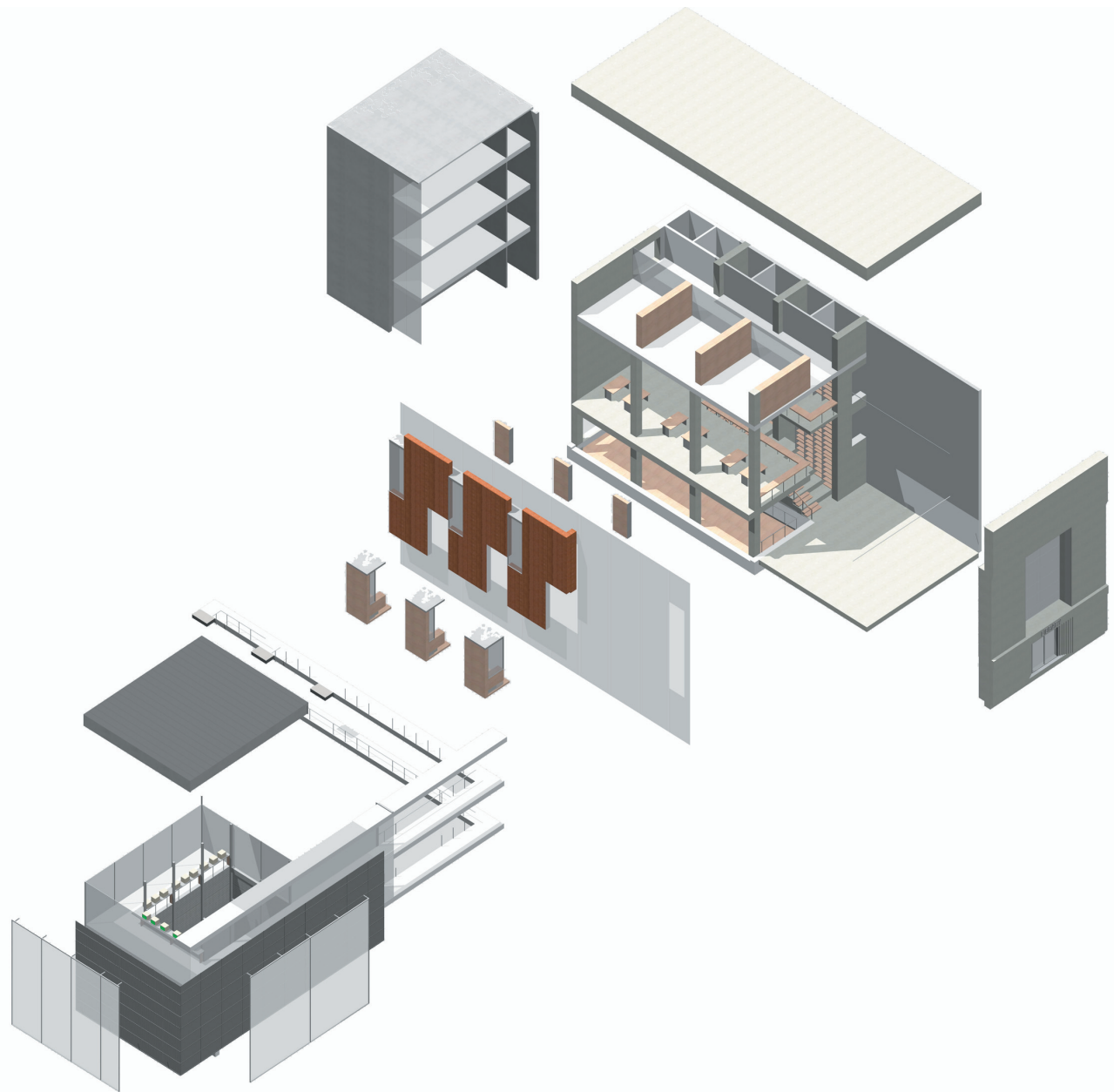
Each facade incorporates layering in a different way in relation to the language it is communicating. Layering of space is important in the library. The manner in which the heavy masonry breaks apart and allows other materials to create zones in the space is important in the identity of the community facade. The wrapping of surfaces in the technology space relates to its function as a billboard. The layers change from solid to more transparent as the user goes from the library to the computer spaces.

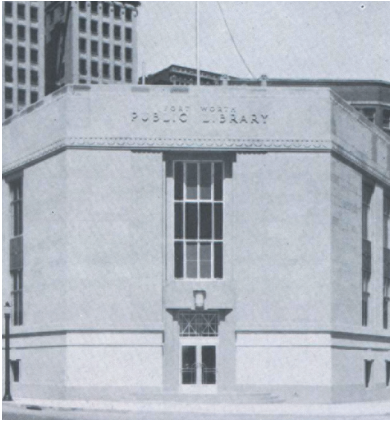
Access

The most important point that allows access to each space is the main lobby. Upon entering, the dialogue of each interior surface is transparent to allow visual access to all of the spaces. The computer space, although separate from the lobby, is visible from the interior. Access is further analyzed in each facade.

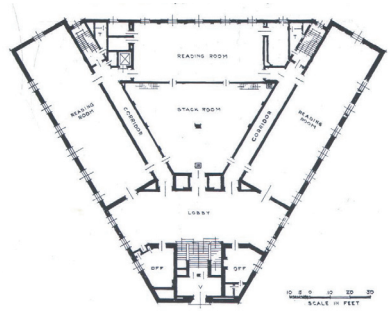
Procession

Procession through the space is explained in the analysis each facade and through the interior spaces on the following pages. Only when the approach to each facade is explained can the procession through the interior spaces be explained in further detail.

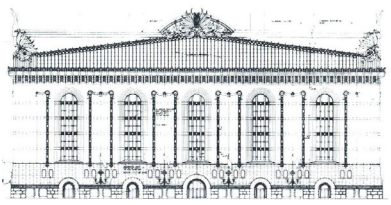




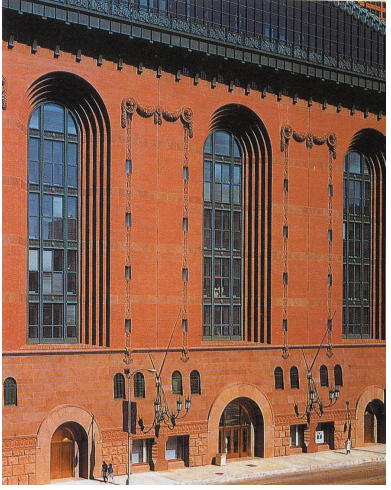
public library, fort worth



public library plan, fort worth



chicago public library facade study



chicago public library facade

1. The Architectural Context

The facade relates to the geometry, scale, hierarchy, and use of the adjacent facades on Clark Street.

2. Who the Communication is Between

The facade communicates primarily to the pedestrians on Clark Street. A wide variety of pedestrians will pass by the library, ranging from wandering window shoppers to fast-paced residents and workers familiar to the community.



3. The Message Being Communicated

The facade is communicating its identity as a civic structure in a neighborhood which has a rough and worn character. It acts as a mask similar to the facades lining Clark Street and to typical library facades. It is a static display of the spaces hierarchy and layout of the interior spaces.

4. The Architectural Language

Geometry

The facade is a static version of the interior spatial layout, marking the hierarchy of spaces through the tripartite system. This relates to geometry of the typical library facade, which derives elements from classical facade design. The centralized zone acts to call out the entry and gives a grandeur to the procession into the space.

Layering

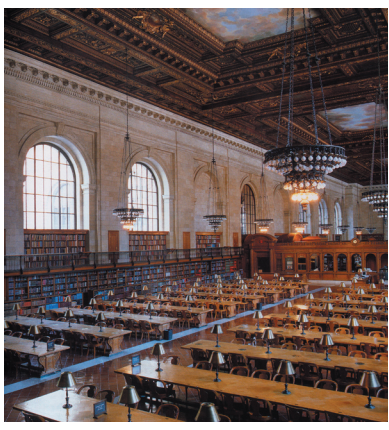
The facade is solid masonry to convey its civic presence. The central opening, however, is screened by the mesh that surrounds the computer space. This marks the junction of the two functional identities, library and computer space. The lintel and cornice are expressed through the impression into the surface. Library name impressed into the surface, relating to the classical facade design.

Access

Access on the facade is expressed through the solids and voids. The impressions in the masonry create play in the facade that relates to the context of Clark Street. The central section is void, but the mesh surface attaches to the interior of the surface. This allows people walking by to view the pedestrians, while the pedestrians only get an impression of the silhouettes walking on the interior. This reinforces the mask and how the middle level as semi-public, similar to typical facade design. Public access is created by the transparent entry.

Procession

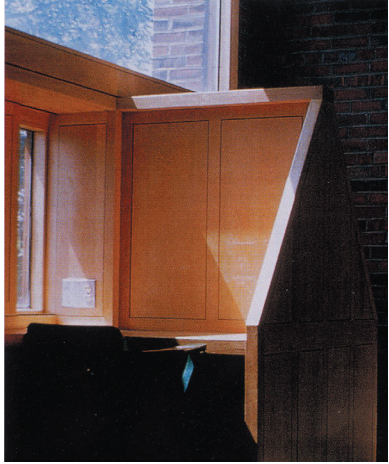
The approach to the facade is primarily from walking down the street and directly interacting with the facade. The procession into the space is done through this facade, which expresses its identity as a static mask symbolic of classical library facades. This marks the procession through the entire building.



traditional library interior space showing large windows



philip exeter academy library exterior



philip exeter academy library interior reading niches

Community | Functional Identity

1. The Architectural Context

The community facade reacts to the residential neighborhood bordering the north edge of the site.

2. Who the Communication is Between

The facade communicates to the residents living in the community.



3. The Message Being Communicated

The library serves the community. Therefore, the facade is communicating its functional identity as a library. It does not rely on elements to mask its identity, but allows the function to become transparent and accessible to the community.

4. The Architectural Language

Geometry

The geometry of the surface is broken down in relation to the character of the residential street. Hierarchy is expressed through the tripartite levels, which relate to the interior spaces. The lower level is the community space, relating to the courtyard. The middle level relates to the large library space, which is identified further by the interior spaces expressed on the surface through materials, scale, and proportion. The upper level is transparent to display the users as the cornice element.

Layering

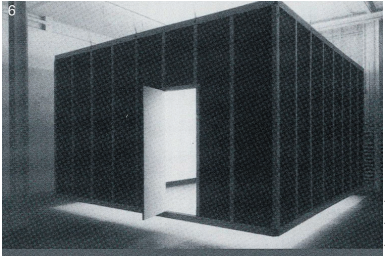
The facade is broken down in materials to relate to each function inside. Reading niches are defined by small changes in material and scale. The large window is an element derived from traditional library buildings, defining the large library reading room. Deep red masonry recalls a more contemporary material used to express the library's inviting nature. Wood is used in the reading niches to create a comfortable environment to read. Surfaces extend into the interior spaces, allowing a continuity in definition of space from inside to outside.

Access

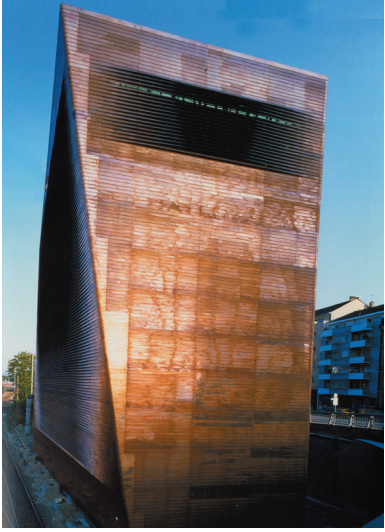
Access is important in the community facade because it is displaying its function as a library. While the front facade wraps the space with a solid material as a mask, the community facade breaks down through different materials and interior spaces. The people become the story, while in the front facade, the materials and geometry are a static display of the building's identity as a library.

Procession

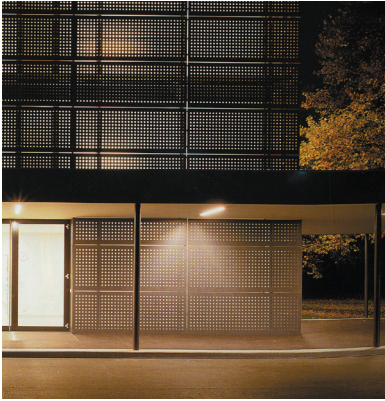
The community facade is accessed through the courtyard. Therefore, it is a more interactive and transparent facade. Opportunities could be explored for the lower level of the interior community spaces to open and interact as part of the courtyard.



glowing box



herzog and de meuron



exterior metal mesh



reflective glass

Billboard | Technological and Symbolic Identity

1. The Architectural Context

The facade relates to its positioning as a billboard to the L-train.

2. Who the Communication is Between

The facade primarily communicates to the passengers on the L-train.



3. The Message Being Communicated

The idea of a billboard is a changing surface that wraps the building. The facade is reflective during the day and transparent at night, creating an interactive and changing billboard for the L-train passengers.

4. The Architectural Language

Geometry

The geometry of the billboard facade relates to its position on the site. The angled piece is positioned similarly to a typical billboard in the Chicago neighborhood. Its scale and proportion relate primarily to its identity as a billboard.

Layering

The initial idea of wrapping facades was derived from the idea of sitting at a computer. The inner layers of skin have varying degrees of transparency to allow for certain visual clues to the interior.

Layer One: Mechanical

The mechanical space is defining the identity that the space is supporting the changing function of the library. The mechanical space is wrapped by a solid surface, allowing the machinery to be heard, but not seen by the pedestrian, thus relating to the noise and commotion from the L-train.

Layer Two: Computer Space

A metal mesh surface wraps the computer space. The computer stations sit facing inward, allowing L-train passengers to view the screens to flash through to the surface. This creates an interactive billboard at night.

Layer Three: Reflectivity

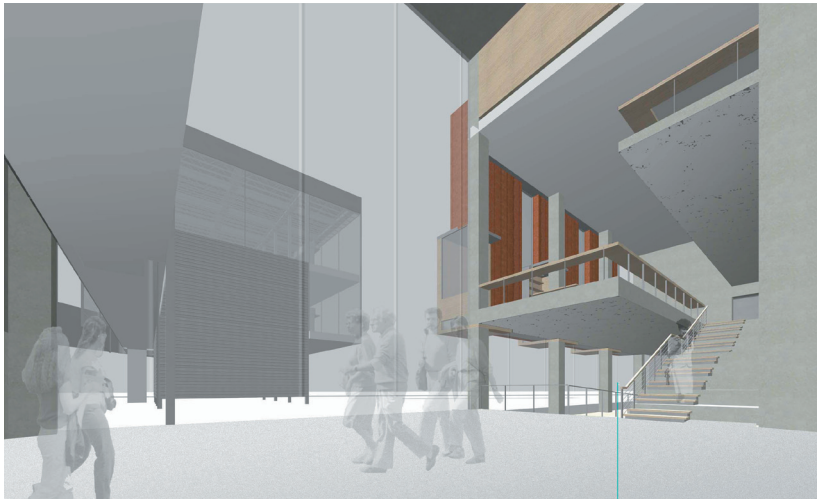
The reflective glass mirrors the energetic nature of the context. The reflectivity is similar to the reflective surface of a computer screen. In this way, it gives clues to its function.

Access

The surfaces wrap the inner function and provide varying degrees of transparency from day to night.

Procession

The positioning of the billboard facade allows for the approach to be primarily important to the L-train passengers. It is inaccessible from the street level, which implies that it is a function that is not dependent on community interaction.



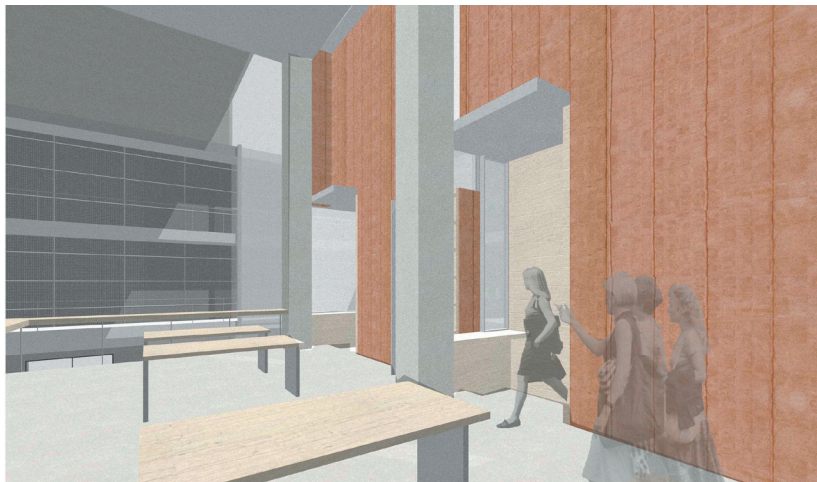
Procession Point One: Lobby

The lobby is the main entrypoint to the entire library, recalling ideas of procession through traditional libraries. From the lobby, views of all the spaces are visible, including the hierarchy of the library space, the courtyard, and the computer space. This allows for the user to become oriented to the building and to become aware of the relationship between the interior spaces and exterior facades.



Procession Point Two: Stairway

The stairway is an interactive space for the gathering of books. This is visible from the courtyard space, further communicating the library's identity as a public space. The wall of books creates a zone between the library space and the circulation space leading to the computer room.



Procession Point Three: Library and Reading Niche

The reading niches are a private zones embedded in the large library space. These spaces allow views to the exterior courtyard and are visible from the courtyard on the exterior surface. Materials continue from the inside to the outside surface, creating a continuity in functional identity on all surfaces.

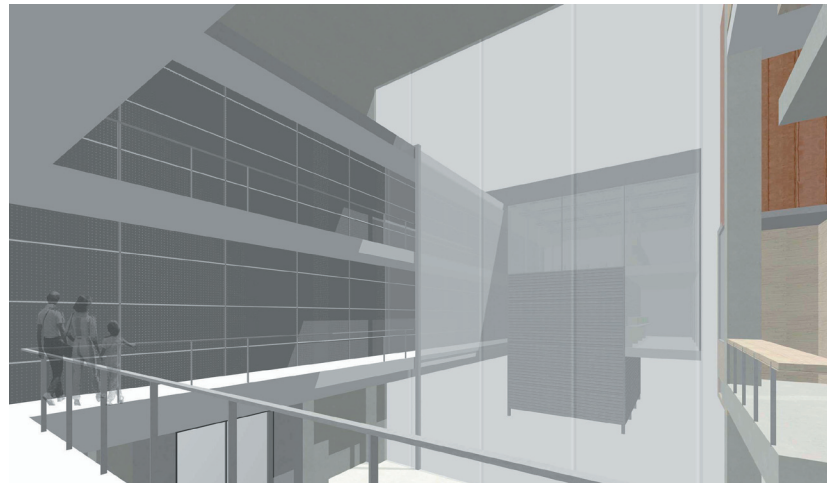
Procession Point Four: Upper Reading Room

The upper reading space is attached to the heavy masonry columns that support the library book wall. This relates to typical library buildings and classical design by the creation of a zone that acts as side aisle, allowing views into the main library space.



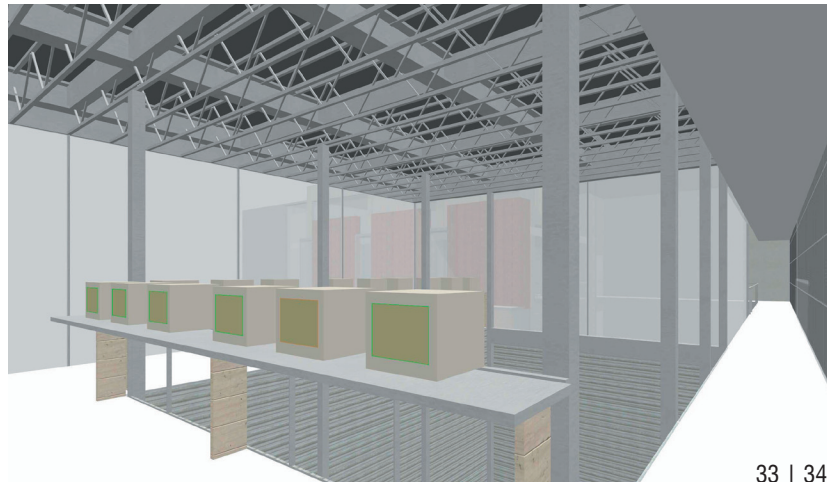
Procession Point Three: Pathway to Computer Space

The pathway to the computer space is important in its relationship to all the surfaces it encounters, including interior surfaces. While proceeding on the path, the layers of surface change to denote a change in function. The heavy masonry breaks down, while the mesh pierces the lobby and further defines the circulation space.



Procession Point Three: Computer Space

While in the computer space, access to the outside is not as available due to the nature of the function as mentioned earlier. A sense of time is realized through the rhythm of the noise of the L-train, but visible access to the L-train is limited.



Analysis and Reflection

As one of the most essential aspects of the overall building design when exploring the topic of communication, the facade develops an initial dialogue expressing the building's identity in relation to the function, site, and cultural context. With the increase in commercial developments and urban sprawl, the facade is often a separate entity designed and integrated without a meaningful connection to the inherent qualities of the building. The language of our built environment is rapidly changing. The notion of a language that is rooted in the function of the building is becoming lost. The primary goal of the thesis was to identify methods to establish a building language that expressed a more meaningful dialogue in relation to a building's identity through the facade. The library became a platform to communicate its evolving identity in today's fast-paced and technology-driven society. By defining who the communication was between, what the message being communicated was, and the methods of defining the language, each facade expressed its identity related to the overall function of the building in today's society. With the condition of our society today, does architecture need to revert back to a more meaningful language to communicate?

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